REMARKS

The Office Action, mailed on September 9, 2004, ("Office Action") is acknowledged. Upon entry of the above claim amendments, claims 1, 4-5, 7-8, and 10-14 are pending in this application. Applicants respectfully request entry of the above claim amendments and submit that these amendments do not comprise new matter.

Claim 1 has been amended to include the subject matter of claim 9 and claim 9 has, accordingly, been canceled.

Claim 1 has been amended and claim 14 has been added to correct the claims from an amendment entered based on a typographical error recited in a previous Office Action. The previous Office Action, mailed September 16, 2003, stated that dependent claim 6 was not anticipated by Karp et al. (IDS ref: ISMB-96, pp. 116-124). Also in the previous Office Action, independent claim 1—upon which dependent claim 6 is based—was found anticipated by Karp et al. Based on the lack of anticipation stated in the previous Office Action, mailed September 16, 2003, with regard to claim 6, claim 1 was amended to recite the subject matter of claim 6. However, the present Office Action states that "claim 6 was not included in the list of rejected claims due to a typographical error." But for this typographical error, claim 1 would not have been amended and claim 6 would not have been cancelled. Accordingly, claim 1 has been amended to remove the subject matter of claim 6, and the subject matter of claim 6 has been returned to new dependent claim 14

Attorney Docket No.: 975319.4

Continued Examination Under 37 CFR 1.114

The Office Action states that the continued examination under 37 CFR 1.114 was timely filed and fees were timely paid and the finality of the previous Office Action has been withdrawn.

Applicants respectfully thank the Examiner for accepting the Request for Continued Examination.

Claim Rejection – 35 U.S.C. § 112

The Examiner has rejected claims 1, 4-5, and 7-13, under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claims the subject matter which applicant regards as the invention.

As discussed above, claim 1 has been amended to correct a change made to claim 1 due to a typographical error in a previous Office Action. The amendment of claim 1 to correct changes made due to the typographical error also removes the language upon which the rejection under 35 U.S.C. § 112 is based.

For at least the foregoing reason, Applicants respectfully submit that the rejection of claims 1, 4-5, and 7-13, under 35 U.S.C. § 112, second paragraph, is rendered moot. As such, Applicants respectfully request that the rejection, under 35 U.S.C. § 112, of claims 1, 4-5, and 7-13 be removed from the present application and that the application be found in a condition for allowance.

Claim Rejection – 35 U.S.C. § 102

35 U.S.C. § 102(b)

The Examiner has variously rejected claims 1, 4-5, 7-8, 11 and 13, under 35 U.S.C. § 102(b), as allegedly being anticipated by Karp et al. (IDS ref: ISMB-96, pp. 116-124) and Karp et al. (IDS ref: Nucleic Acids Research (1997) vol. 25, no. 1, pp. 43-50).

The subject matter of claim 9 was not rejected by the Office Action as anticipated by either Karp et al. reference. Claim 1, as amended, now recites the subject matter of claim 9. The invention as now recited in independent claim 1—comprising a dynamic database comprising signal transduction information—is not taught or disclosed by either of the Karp et al. references. Further, the Karp et al. references do not disclose any teaching that would have lead one of skill in the art to reach the advantages and benefits conferred by the present invention comprising a dynamic database comprising signal transduction information. Applicants respectfully submit that independent claim 1 (and the corresponding dependent claims) are both novel and nonobvious, as nothing in the Karp et al. references would lead one to reach the present invention.

For at least the foregoing reason, Applicants respectfully submit that claims 1, 4-5, 7-8, 11 and 13, even further distinguish over any and all disclosure and teaching of the Karp et al. references and that the amendment to claim 1 renders the rejections moot. As such, Applicants respectfully request that the rejections of claims 1, 4-5, 7-8, 11 and 13 be removed from the present application and that the application be found in a condition for allowance.

35 U.S.C. § 102 (a) and (e)

The Examiner has rejected claims 1, 4-5, and 7-13, under 35 U.S.C. § 102(a) and (e), as allegedly being anticipated by Thalhammer-Reyero (US 5,930,154).

Applicants respectfully submit that claim 1, as amended, recites a combination of elements that even more clearly distinguishes over the teaching and disclosure of Thalhammer-Reyero. Applicants respectfully submit that the present invention, as recited in the claims as amended, is distinguished over the teaching and disclosure of Thalhammer-Reyero. *Inter alia*, Applicants respectfully submit that the element of a "dynamic database", as recited, utilized and defined in the specification, is not disclosed and taught by Thalhammer-Reyero—particularly, as relevant to the end-user of the system. For example, the "dynamic database", as utilized and defined in the present invention, is entirely flexible to the end-user. The "dynamic database" can be completely configured by the end-user of the system. These changes to the "dynamic database", in turn, affect the inference engine.

The term "dynamic" may be recited by Thalhammer-Reyero. But, it is not used in conjunction with a database, nor is it defined by Thalhammer-Reyero or utilized in the same manner as in the specification and claims of the present invention. In contrast to the present invention where the "dynamic database" can be completely configured by the end-user, the method taught by Thalhammer-Reyero is a database that is "part of the hidden infrastructure not available for manipulation by the end-users of this system." (col. 19, lines 9-12)

For at least the foregoing reasons Applicants respectfully submit that independent claim 1, as amended, and the claims dependent therefrom, even further distinguish over any and all disclosure and teaching of Thalhammer-Reyero. As such, Applicants respectfully request that

Attorney Docket No.: 975319.4

the rejections, under 35 U.S.C. § 102(a) and (e), be removed from the present application and that

the application be found in a condition for allowance.

Conclusion

Applicants respectfully request entrance of the above claim amendments. In view of the

above amendments and remarks, early notification of a favorable consideration is respectfully

requested. Should there be any outstanding matters that need to be resolved in the present

application, the Examiner is respectfully requested to contact the undersigned at the telephone

number listed below to conduct an interview in an effort to expedite prosecution in connection

with the present application. The Director is hereby authorized to charge any fees which may be

required, or credit any overpayment, to Deposit Account Number 50-3380.

Respectfully submitted,

David H. Milligan

Registration No. 42,893

Customer No. 49442 BAKER & DANIELS

805 15th Street, N.W., Suite 700

Washington, DC 20005

(202) 312-7440 Telephone

(202) 312 7460 Facsimile

DMH/lhr